Packet-Radio Digest   Wed, 28 Jul 93   Volume 93 : Issue 221

Today's Topics:
                         Archive Sites??
                    BayComm and BayPac Modems
                     Baycom Modem (2 msgs)
                   Comments wanted for KPC3
                            DOVE-17
                    Need address of US AMSAT
                   Packet can't work (3 msgs)
                        Packet Capture
                      Packet HF in Cuba
                            X1J

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 27 Jul 1993 10:51:25 -0700
From: haven.umd.edu!cs.umd.edu!mojo.eng.umd.edu!news.isi.com!news.isi.com!not-for-
mail@uunet.uu.net
Subject: Archive Sites??
To: packet-radio@ucsd.edu

Anyone know of an archive site for this newsgroup? An FTP site would be
preferable, but a mail server is OK.

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Jerry Gardner (jerry@isi.com) | "Violence is the last refuge of
Integrated Systems, Inc. | the incompetent" - Isaac Asimov

Date: 27 Jul 93 19:26:32 GMT
From: news-mail-gateway@ucsd.edu
Subject: BayComm and BayPac Modems
To: packet-radio@ucsd.edu

Hello there.

    I wonder if anyone has used any of these modems:
         BayCom
    or
         BayPac
    for software-based TNC's?

    Your comments on their performance will be appreciated.
    I would specially like to know about their KISS mode capabilitis and
    baud rate limits.

    --73's de N1HPP
      Ali Taalebi

Date: Tue, 27 Jul 1993 13:47:54 GMT
From: agate!howland.reston.ans.net!gatech!usenet.ufl.edu!mlb.semi.harris.com!
controls.ccd.harris.com!drs@ames.arpa
Subject: Baycom Modem
To: packet-radio@ucsd.edu

I am trying to build a Baycom Modem to get into packet with. The only part
I need now is the Texas Instruments TCM3105 IC. Anyone out there know where
I can purchase one or more of these things? Thanks...Doug...N4IJ

drs@ccd.harris.com

Date: Tue, 27 Jul 1993 23:20:06 GMT
From: pa.dec.com!uvo.dec.com!news.crl.dec.com!payne@decwrl.dec.com
Subject: Baycom Modem
To: packet-radio@ucsd.edu

In article <1993Jul27.134754.11838@ccd.harris.com> drs@ccd.harris.com (Doug
Snowden) writes:
>I am trying to build a Baycom Modem to get into packet with. The only part
>I need now is the Texas Instruments TCM3105 IC. Anyone out there know where
>I can purchase one or more of these things? Thanks...Doug...N4IJ

* JDR Microdevices, (800) 538-5000, $9.95/each, no minimum order
* Active Electronics, (800) 677-8899, $6.47/each, $25.00 minimum order

(Active also has the 4.4336 mHz crystal that you'll need to go with the chip).

Prices are current as of about 2 months ago.

--
Andrew C. Payne
DEC Cambridge Research Lab

Date: 28 Jul 93 02:56:43 GMT
From: ogicse!uwm.edu!vixen.cso.uiuc.edu!howland.reston.ans.net!noc.near.net!lynx!
sehrlich@network.ucsd.edu
Subject: Comments wanted for KPC3
To: packet-radio@ucsd.edu

A friend of mine is looking for an easy to use, cheap, TNC.
Some friends of mine have the KPC3 and really like it.

I'd like to see what others on the net have so say about the unit.

Thanks much.

I will try to summarize the responses (if I get enough).

73,
Scott

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| Scott Ehrlich   Internet: acm_se@neu.edu |
| Amateur Radio: wy1z   AX.25: wy1z@n0ary.#nocal.ca.usa.na |
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| Scott Ehrlich   Internet: acm_se@neu.edu |
| Amateur Radio: wy1z   AX.25: wy1z@n0ary.#nocal.ca.usa.na |
===

Date: 26 Jul 93 20:14:00 GMT
From: twwells!pics!james.mollica@RUTGERS.EDU
Subject: DOVE-17

To: packet-radio@ucsd.edu

DC.SB SAT @ AMSAT $ANS-205.01
.DOVE RECOVERY EFFORTS STARTED

DC.HR AMSAT NEWS SERVICE BULLETIN 205.01 FROM AMSAT HQ
.SILVER SPRING, MD JULY 24, 1993
.TO ALL RADIO AMATEURS BT
.BID: $ANS-205.01

DC.DOVE-OSCAR-17 (DO-17) Recovery Efforts Started This Week!

DC.DOVE ground station control operator Jim White (WD0E) accomplished a major
.first step in the recovery of DOVE-OSCAR-17 (DO-17). With the assistance
.of Bill McCaa (K0RZ) thirty miles away, WD0E was able to send commands and
.listen to the results using an phone-patch between him and K0RZ. K0RZ's
.station, using a 4 ft diameter Mode-S dish and a NIR-10 DSP unit, was the
.S-Band "ears" for WD0E. Using K0RZ's excellent S-Band set up, WD0E was
.able to send commands and listen to DOVE's reponses quite clearly. The
.first command that WD0E sent was what he refers to as the "fire-code."
.This immediately reset DOVE's on-board computer to its most basic operating
.system software known as MBL. MBL is stored in DOVE's computer in Read
.Only Memory (ROM) chips. After having verified that the computer had re-
.set, WD0E then sent several commands to turn-on and then off the S-Band
.transmitter to be sure that the Telemetry and Command (T&C) system was
.functioning. After having confidence that DOVE was hearing the commands
.and reponding correctly, WD0E then commanded DOVE to send 30 frames of
.telemetry on its 2M downlink frequency of 145.825 MHz. While the 30 frames
.of telemetry was being sent, K0RZ was simultaneously recording and decoding
.it. WD0E points out that the major significance of this first step was
.that it assured him that DOVE's primary systems were still in good shape
.and that the receivers and transmitters were working normally along with
.the T&C system. From this point onward, Harold Price (NK6K) will proceed
.to reload the "house-keeping" software. If necessary, K0RZ has volunteered
.his station to assist in the DOVE "house-keeping" software reload oper-
.ation. With this sucessful first step, WD0E is very optimistic that DOVE
.can not only be restored to full operation, but it can be made to "speak"
.and perform its primary mission of education. Please stay tuned to the
.AMSAT News Service (ANS) bulletins for further updates on the status of the
.DOVE recovery effort.

Jim

* 1st 1.10 #1439 * DXING OSCAR 13 145.890 AND SAREX 145.550! N2NRD @ AMSAT.ORG

+---+
| Pics OnLine MultiUser System   609/753-2540 HST 609/753-2605 (V32bis) |

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| Massive File Collection - Over 45,000 Files OnLine - 250 Newsgroups   |
+----------------------------------------------------------------------+
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Date: 26 Jul 93 15:53:45
From: idacrd.ccr-p.ida.org!idacrd!n4hy@uunet.uu.net
Subject: Need address of US AMSAT
To: packet-radio@ucsd.edu

AMSAT-NA
P.O. Box 27
Washington, D.C. 20044

(301)-589-6062
--

Robert W. McGwier | n4hy@ccr-p.ida.org
Center for Communications Research | Interests: amateur radio, astronomy,golf
Princeton, N.J. 08520 | Asst Scoutmaster Troop 5700, Hightstown

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Date: 28 Jul 93 03:42:00 GMT
From: ogicse!uwm.edu!spool.mu.edu!nigel.msen.com!yale.edu!cs.yale.edu!
ewing@network.ucsd.edu
Subject: Packet can't work
To: packet-radio@ucsd.edu

Is AX25 impossible? I wonder. My understanding (doubtless flawed) is
that AX25 as implemented in TNCs resembles Ethernet more or less. But there
are some major differences. When you transmit, you don't get any real-time
indication if you're "doubling" with another transmitter. You just wait
a probabilistic time period after receiving the last packet before you
try to send yours. The other big difference is that there is no guarantee
that you can hear all the stations on channel. The guy you're connected
to may be Q5 for you, but you may be Q3 against some 3rd party who is Q5
to him. I.e., the third party will degrade your throughput even though
you can't hear him/her. All this is very noticeable here in CT, where
lots of us "users" are in valleys talking to repeaters or switches at
hill top locations. (This is also one reason why HF packet is so awful.)

So, I think the "collision sense - multi access" model isn't very optimal.
We should get much better throughput if first class mountain-top people
were able to do time division and give time slots to us second class slobs
in the valleys. (Of course, even first-class locations will experience
the third party problem over longer ranges.)

Has anyone tried anything along these lines? Are there
commercial/scientific networking regimes similar to this? There is a
crude feature in the tcp/ip world using ICMP to tell you to "shut up
for a while", but we could do better than that!

Idly yours,

--
Martin Ewing AA6E   ewing-martin@yale.edu (ewing@yalevm.bitnet)
Yale University Science & Engineering Computing Facility 203-432-4243

Date: 28 Jul 1993 10:14:10 GMT
From: pipex!sunic!news.funet.fi!funic!nokia.fi!madonna.trs.ntc.nokia.com!
sivula@uunet.uu.net
Subject: Packet can't work
To: packet-radio@ucsd.edu

Hi folks.
This issue about the impossibility of packet reminds me of the DAMA protocol
that as far as I know as good as completely removes the collision problem.
There is a software called TheNetNode available that holds the master algorithm
for this protocol. Is there anybody out there who has used this software or does
anyone know if it is as good as it is claimed. Can it be used with F6FBB BBS
software, and where can it be found???

73, Timo OH6KK&OH2LVZ

Date: Wed, 28 Jul 1993 08:33:54 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!kd4nc!
ke4zv!gary@network.ucsd.edu
Subject: Packet can't work
To: packet-radio@ucsd.edu

In article <1993Jul28.034200.9730@cs.yale.edu> ewing@yale.edu (Martin Ewing)
writes:
>Is AX25 impossible? I wonder. My understanding (doubtless flawed) is
>that AX25 as implemented in TNCs resembles Ethernet more or less. But there
>are some major differences. When you transmit, you don't get any real-time
>indication if you're "doubling" with another transmitter. You just wait
>a probabilistic time period after receiving the last packet before you
>try to send yours. The other big difference is that there is no guarantee
>that you can hear all the stations on channel. The guy you're connected
>to may be Q5 for you, but you may be Q3 against some 3rd party who is Q5
>to him. I.e., the third party will degrade your throughput even though

>you can't hear him/her. All this is very noticeable here in CT, where
>lots of us "users" are in valleys talking to repeaters or switches at
>hill top locations. (This is also one reason why HF packet is so awful.)
>
>So, I think the "collision sense - multi access" model isn't very optimal.
>We should get much better throughput if first class mountain-top people
>were able to do time division and give time slots to us second class slobs
>in the valleys. (Of course, even first-class locations will experience
>the third party problem over longer ranges.)

That's CARRIER sense, multiple access. The CD, collision detection,
mode of ethernet isn't possible in a simplex system. However, many
of us have recognized this fault, a media problem, and have gone
to duplex repeaters instead of digipeaters to solve it. The hidden
terminal problem goes away because now you hear everything the
repeater hears in real time. And, if you operate your station in
full duplex as well, you can even implement CD.

Slotted protocols have other horrible problems, like dealing with
stations attempting to join the net, or stations that drop off
the net unexpectedly. And their thruput is less than half that
of the duplex repeater due to the time consumed by the slotting
beacons and the simplex nature of the media.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: 27 Jul 93 19:10:11 GMT
From: ucla-se!seal!nazareth@locus.ucla.edu
Subject: Packet Capture
To: packet-radio@ucsd.edu

Hi,

I was just wondering if there is anyone out there who knows of a program to
capture the packets generated from a packet driver. In particular I have a
slip driver and I want to capture all the data that the driver is sending to
the serial port, with all headers, framing bits, etc. Is there a pre-existing
program that will do this?

Thanks for any help that you can provide

Date: Tue, 27 Jul 1993 17:57:26 GMT
From: agate!howland.reston.ans.net!torn!nott!cunews!freenet.carleton.ca!
Freenet.carleton.ca!aa367@ames.arpa
Subject: Packet HF in Cuba
To: packet-radio@ucsd.edu

If anyone would like to assist in the way of equipment to
set up a packet private station in Havana the primary item
needed is a simple computer that will do the job plus act as
a BBS for land line ect.

This project could be a reality within a few weeks.

Call me anytime on 613 592 1401

Roger Townsend
VE3XVK

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Date: Sat, 24 Jul 1993 15:16:05 +0000
From: pipex!warwick!qmw-dcs!qmw!demon!llondel.demon.co.uk!dave@uunet.uu.net
Subject: X1J
To: packet-radio@ucsd.edu

In article <1993Jul24.132924.29038@nntpd2.cxo.dec.com> segrest@bobseg.enet.dec.com
writes:
>
> What is the new X1J package going to do for us? I know you said it was in
> beta mode but it would be nice to get an advance glimpse at the new features
> or fixes that will (or may be) included. There was also a hint that the ACL
> stuff might be deleted in the release notes for X1H. I would be curious to
> know if we are going to suffer this act of regression....
>
The ACL command is still there on my local beta-test node...... A most useful
facility!

This is an extract from the into.txt file with the beta-release:

>   INTRODUCING TheNet X-1J
>

>TheNet X-1J extends TheNet X-1H with a number of additions as detailed
>below. The main change, however, is support for a simple deviation meter
>that shows each station's deviation in kilohertz in the heard list, by
>measuring the receive audio level with an A-D converter at the end of each
>packet.
>
>The other changes are : Control of slime trails; The information text in RAM
>has been doubled in size; The info, ctext and btext messages may be multiple
>lines; Nodes broadcasts occur 60 seconds after power up; Optional reconnect
>to the node following remote disconnect; PARMS, MODE etc parameters may be
>changed by specifying parameter number and value; Digi up and downlinks may
>be selectively en/disabled; Level 4 retries (min) has been reduced to 1
>and an MTU command has been introduced to set MTU data. The handling of
>node aliases may be made case sensitive and TALK may be configured to pass 8
>bit data.
>
>TheNet X-1H did not extend the functionality of X-1G, but fixed 3 bugs. In
>addition, the ARP digi bug patch released earlier this year has been
>included in X-1J.

It also fixes some interesting little 'features' in X1H - try a ping of length
19 or 20 to an X1H node......

Dave

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25   *   You think *you* have problems?   *
* dave@llondel.demon.co.uk Internet *   What do you do if you *are*   *
* g4wrw@g4wrw.ampr.org   Amprnet *   a manically depressed robot?? *
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End of Packet-Radio Digest V93 #221
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